

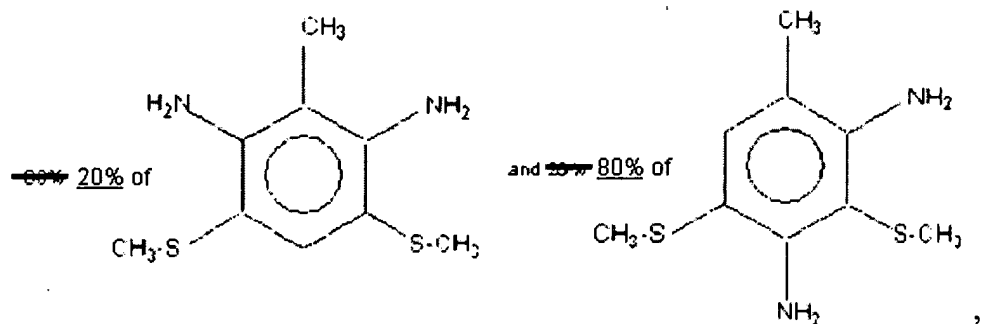
Remarks/Arguments:

A. Status of the Claims

Claims 22-43 were pending when the Final Office Action dated September 20, 2005, was mailed to Applicants. Claims 22, 28, 31, 32, and 43 have been amended, claims 25-27 have been canceled, and no claims have been added. Support for the amendments can be found throughout the specification and claims as originally filed. For example, claim 22 incorporates the subject matter of claim 27. Claim 28 has been amended to revise its dependency to claim 22. Claim 31 has been amended to further limit claim 22 (support can be found, for example, in the specification at page 9, lines 1-11, and page 10, lines 7-10). Typographical errors have been corrected in claims 32 (H added to last structure) and 43 (80%/20% mixture switched). Support showing that these were typographical errors can be found, for example, in the specification at page 9, lines 25-26, and page 22, lines 11-13 and 17-30, respectively. Claims 22-24 and 28-43 are currently pending.

B. Written Description Rejection Is Overcome

Claim 43 is rejected under 35 U.S.C. § 112, first paragraph, for failing to satisfy the written description requirement. Applicants note that a typographical error occurred in the previous response and has been corrected. For instance, claim 43 now recites, in part: "wherein the diamine is a mixture of by weight:



Written support for this claim can be found in the specification at page 22, lines 11-13 and 17-30.

Applicants request that the written description rejection of claim 43 be withdrawn.

C. The Indefiniteness Rejection Is Overcome

Claims 31 and 32 are rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. The Examiner contends that it is unclear what is mixed with the diamine.

Applicants disagree. A person of ordinary skill in the art would understand these claims when read in light of the specification. However, in an effort to advance prosecution and obtain prompt allowance, claim 31 has been revised to clearly indicate that the material is obtained from a mixture comprising: the prepolymer (element a); the diamine (element b); and a di-, tri- or tetra alcohol or a di-, tri-, or tetra thiol, or a mixture of the alcohol and thiol (element c). Therefore, claim 31 describes the reaction of the pre-polymer with the diamine and an alcohol and/or thiol additional monomer. In non-limiting aspects, this can replace some urea segments with urethane segments (*e.g.*, in the case of an alcohol-type additional monomer) or thio-urethane segments (*e.g.*, in the case of a thiol-type additional monomer).

The indefiniteness rejections of claims 31 and 32 are therefore overcome. Applicants request that the rejections be withdrawn.

D. The Anticipation Rejections Are Overcome

1. Summary of Rejections

The Action presents two separate anticipation rejections under 35 U.S.C. § 102(a) for claims 22-27, 29, 30, 33-35, 38, and 40-43. The Action contends that references WO 01/36507 and WO 01/36508 (the '507 and '508 Applications) both disclose "an optical polymerizate, suitable for the production of optical lens material having a refractive index that exceeds that claimed...." The Action, page 3.

Applicants disagree. Claims 22-27, 29, 30, 33-35, 38, and 40-43 prior to the amendments made above, were not anticipated by the cited references (see arguments in previous response). The pending claims are also not anticipated by the cited references.

2. Applicants' Claimed Invention

Independent claim 22, which includes the subject matter of canceled claim 27, is directed to “[a] transparent, non-elastomeric, polythiourethane/urea material comprising the reaction product of: (a) at least one (α , ω)-diiso(thio)cyanate **polysulfide** prepolymer...**said prepolymer being free from disulfide (-S-S-) linkage**...wherein the (α , ω)-diiso(thio)cyanate polysulfide prepolymer is the reaction product of at least one...(α , ω)-diol or dithiol prepolymer, said (α , ω)-diol or dithiol prepolymer **being a polysulfide or a mixture of polysulfides.**” Claim 22 (emphasis added).

The term “polysulfide” pre-polymer includes a pre-polymer containing multiple sulfide groups (-S-) in the pre-polymer chain. A non-limiting example of a polysulfide is shown in original claim 17 of Applicants' specification. Thiol groups, which may be present at the terminal positions of the pre-polymer, are not considered sulfide groups. This is confirmed by the online version of the IUPAC Compendium of Chemical Terminology, 2nd Edition (1997), which defines “sulfides” as:

A compound having the structure RSR (R \neq H).

Appendix A.

As discussed in the following subsection, the '507 and '508 Applications do not appear to disclose several elements of Applicants' claimed invention.

3. The Cited References Fail To Disclose Every Element of the Claimed Invention

The '507 and '508 Applications appear to describe polythiol monomers having a sulfide group. '507 and '508 Applications, page 6, line 6, and page 6, line 2, respectively. However, there does not appear to be any disclosure of “at least one (α , ω)-diiso(thio)cyanate **polysulfide** prepolymer... **being free from disulfide (-S-S-) linkage**...said prepolymer is the reaction product of at least one...(α , ω)-diol or dithiol prepolymer being a **polysulfide** or a mixture of **polysulfides**.” Claim 22 (emphasis added).

For instance, the only polythiols disclosed in the cited references that appear to have a sulfide group include:

- DMDS, which contains only one sulfide group and is therefore not a polysulfide.
- Dithianes, such as the compound illustrated in formula (II) on page 9 of both cited references with $n = 1$, which are monomers and not prepolymers.
- Polythiols (see pages 7-9 of cited references) which all appear to include at least one disulfide group (-S-S-).

It is apparent that the cited references therefore fail to disclose prepolymers “being free from disulfide (-S-S-) linkage” and being “the reaction product of at least one...polysulfide or a mixture of polysulfides.”

Additionally, Applicants note that the cited references appear to describe the preparation of iso(thio)cyanate pre-polymers by reaction of a polyiso(thio)cyanate monomer with a polythiol monomer (e.g., page 3, line 30 of the '507 Application). There does not appear to be any disclosure of using Applicants' claimed “at least one (α , ω)-diol or dithiol prepolymer...” to make an iso(thio)cyanate pre-polymer.

For at least these two reasons, it is clear that the cited references fail to disclose every element of Applicants' claimed invention. Because of this, the present anticipation rejections are overcome, and Applicants request that the rejections be withdrawn.

E. Conclusion

Applicants believe that the present document is a full and complete response to the Final Office Action dated September 20, 2005. The present case is in condition for allowance, and such favorable action is requested.

A check in the amount of \$1,810.00 is enclosed, which includes the fee for filing a Request for Continued Examination under 37 C.F.R. § 1.114 (\$790.00) and the fee for a three-month extension of time for a large entity status (\$1,020.00). If the check is inadvertently omitted, or should any additional fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed materials, or should an overpayment be included, the Commissioner is authorized to deduct or credit the appropriate fees from or to Fulbright & Jaworski Deposit Account No. 50-1212/ESSR:058US.